

a first semiconductor layer of a first conductivity type having first and second major surfaces;

a second semiconductor layer of a second conductivity type formed on the first major surface of said first semiconductor layer;

a third semiconductor layer of the second conductivity type formed on said second semiconductor layer;

a fourth semiconductor layer of the first conductivity type formed on said third semiconductor layer;

at least one first trench and at least one second trench arranged to penetrate through at least said fourth semiconductor layer from a surface of said fourth semiconductor layer;

a first semiconductor region of the second conductivity type selectively formed in said surface of said fourth semiconductor layer vicinal to said at least one first trench;

a first insulating film formed on an internal wall of said at least one first trench;

a first material serving as a control electrode buried in said at least one first trench and formed on said first insulating film;

a second material formed in said at least one second trench, the second material not being a control electrode;

a first main electrode electrically connected to said second material formed in said at least one second trench and to at least a part of said first semiconductor region and formed over a surface of said fourth semiconductor layer; and

a second main electrode formed on the second major surface of said first semiconductor layer.

2. (Amended) The semiconductor device according to claim 1, wherein

a distance between said at least one first trench and said at least one second trench is 5 μm or

less.

Sub B2> 3. (Amended) The semiconductor device according to claim 1, wherein

said at least one first trench includes a trench formed in a predetermined direction along said first major surface of said first semiconductor layer,

said at least one second trench includes a trench formed in said predetermined direction,

said first semiconductor region includes a first section formed in a vicinity of said at least one first trench and a second section extended from said first section in such a direction as to go away from said at least one first trench, and

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said first main electrode is directly formed on said second section to carry out an electrical connection to said first semiconductor region.

4. (Amended) The semiconductor device according to claim 3, wherein

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said first semiconductor region includes a third section which is further extended from said second section and is formed in a vicinity of said at least one second trench, and

said first main electrode is further formed directly on said third section to carry out said electrical connection to said first semiconductor region.

5. (Amended) The semiconductor device according to claim 4, wherein said second and third sections include a plurality of second and third sections respectively, and

said plurality of third sections are selectively formed in the vicinity of said at least one second trench.

6. (Amended) The semiconductor device according to claim 1, further comprising:

a second semiconductor region of the first conductivity type formed in said surface of said fourth semiconductor layer contiguous to said at least one second trench, said second semiconductor region having a concentration of an impurity of the first conductivity type set

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to be higher than that of said fourth semiconductor layer.

8. (Amended) The semiconductor device according to claim 1, further comprising:
a plurality of second trenches.

9. (Amended) The semiconductor device according to claim 1, wherein
said at least one first trench and said at least one second trench have equal formation widths.

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10. (Amended) The semiconductor device according to claim 1, further comprising:
a second insulating film formed on an internal wall of said at least one second trench.

11. (Amended) The semiconductor device according to claim 10, further comprising
a conductive region buried in said at least one second trench and formed on said second
insulating film.

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13. (Amended) The semiconductor device according to claim 1, further comprising:
a sixth semiconductor layer of the second conductivity type formed between said first
semiconductor layer and said second semiconductor layer, said sixth semiconductor layer
having a concentration of an impurity of the second conductivity type higher than that of said
second semiconductor layer.

Please add new Claims 21-32 as follows:

21. (New) The semiconductor device according to claim 1, wherein
said first semiconductor region is not vicinal to said at least one second trench.

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22. (New) The semiconductor device according to claim 21, wherein the first main
electrode is formed in direct contact over an entire top surface of said fourth semiconductor
layer around said at least one second trench.

23. (New) The semiconductor device according to claim 22, wherein the first main
electrode is formed in direct contact over entire said top surface of said fourth semiconductor
layer between said at least one first trench and said at least one second trench.

24. (New) The semiconductor device according to claim 1, further comprising:
a plurality of first trenches, wherein said at least one second trench is provided
between two adjacent first trenches.

25. (New) The semiconductor device according to claim 24, further comprising:
a plurality of second trenches provided between two adjacent first trenches.

26. (New) The semiconductor device according to claim 25, wherein the first main
electrode is formed in direct contact over an entire top surface of said fourth semiconductor
layer among said plurality of second trenches.

27. (New) The semiconductor device according to claim 26, wherein the first main
electrode is formed in direct contact over entire said top surface of said fourth semiconductor
layer between each first trench of said plurality of first trenches and each second trench of
said plurality of second trenches.

28. (New) The semiconductor device according to claim 24, wherein the first main
electrode is formed in direct contact over an entire top surface of said fourth semiconductor
layer around said at least one second trench.

29. (New) The semiconductor device according to claim 28, wherein the first main
electrode is formed in direct contact over entire said top surface of said fourth semiconductor
layer between each first trench of said plurality of first trenches and said at least one second
trench.

30. (New) The semiconductor device according to claim 1, wherein the first main
electrode is formed in direct contact over an entire top surface of said fourth semiconductor
layer around said at least one second trench.

31. (New) The semiconductor device according to claim 30, wherein the first main